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EXAMINER
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KISS, ERIC B

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/691,968

Applicant(s)

PINERA ET AL.

Examiner

Eric B. Kiss

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1-31 have been examined.

#### ***Oath/Declaration***

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

Applicant has only acknowledged the duty to disclose information under 37 CFR 1.56(a).

The duty to disclose information under 37 CFR 1.56, in its entirety (including 37 CFR 1.56(a-e)), must be acknowledged.

#### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: "324", "326", "330", "334", "and "336". A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office

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action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(3) because they contain numbers, letters, and/or reference characters which are placed in the drawings in a manner interfering with their comprehension, i.e. they cross or mingle with the lines in the drawings (see Figs. 3A and 3B). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Specification*

5. The use of trademarks, such as JAVA and JAVA BEAN, has been noted in this application. Trademarks should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

6. The disclosure is objected to because of the following informalities: The Examiner presumes that all references to "Universal Datagram Protocol" should instead read --User Datagram Protocol--, in concordance with the art-accepted definition of the term "UDP". The

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Examiner recognizes that the term "Universal Datagram Protocol" has been occasionally used in the Prior Art in reference to the UDP (User Datagram Protocol) Specification. Accordingly, the two terms may be considered art-recognized equivalents. However, an amendment to the specification and claims changing the terminology to "User Datagram Protocol" would promote clarity in the disclosure.

Appropriate correction is required.

### *Claim Objections*

7. Claim 1 is objected to because of the following informalities:

"updates" in line 12 should presumably read --update--; and

"update said" in line 13 should presumably read --update to said--.

Appropriate correction is required.

8. Claim 10 is objected to because of the following informalities:

The comma (,) at the end of line 3 should be removed.

Appropriate correction is required.

9. Claims 7 and 21 are objected to because of the following informalities:

"Universal Datagram Protocol" should presumably read --User Datagram Protocol-- (see item 6 above).

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 7, 12, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 contains the trademark/trade name JAVA. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a particular programming language product and, accordingly, the identification/description is indefinite.

Claims 7 and 21 essentially recite generating UDP packets and transmitting the UDP packets over the second connection. As UDP is a connectionless transport protocol (see, for

example, p. 542 of Andrew S. Tanenbaum, "Computer Networks," 1996, Prentice Hall PTR, third ed.), it is unclear to the Examiner how the limitations described in these claims can correctly further limit parent claims 6 and 20 without an explanation of how the established connection is used with the connectionless protocol. In the interest of compact prosecution, the Examiner interprets the limitations as the use of UDP packets in lieu of using the second connection for transmitting the update notifications.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-6, 10, 13-20, and 24-31 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,920,725 to Ma et al.

As per claim 1, *Ma et al.* disclose establishing a first communications connection between a platform managing active application components and a configuration client (client app 74 and object adapter 80; see, for example, Fig. 5; col. 8, lines 10-34; and col. 9, lines 6-43); establishing a second communications connection between said configuration client and a configuration server (object adapter 80 and meta server 70; see, for example, Fig. 5; and col. 11,

lines 1-24); delivering updates to said configuration client over said second communications connection, wherein each update corresponds to at least one particular application component (client classes are updated; see, for example, Figs. 5 and 8; col. 9, lines 6-43; and col. 11, lines 25-40); notifying said platform that updates are available (see, for example, col. 9, lines 6-43); responsive to said notification, terminating execution of said particular active application components, delivering each said update over said first communications connection to said platform, applying each said update to said at least one corresponding application component, and re-executing each said update application component (see, for example, col. 9, lines 6-43; and col. 11, lines 25-40).

As per claim 2, *Ma et al.* further disclose the step of terminating comprising: identifying said at least one particular corresponding application component to be updated based on said notification (see, for example, col. 9, lines 6-43; and col. 10, lines 39-66); terminating instances of each said identified application component (objects having a reference count of zero are deleted; see, for example, col. 9, lines 6-43); and removing interdependencies between said terminated application component instances and other application components (for example, new references to objects marked invalid are no longer made; see, for example, col. 10, lines 39-66).

As per claim 3, *Ma et al.* further disclose the re-executing step comprising: instantiating each said updated application component (see, for example, col. 10, lines 39-66); and initializing each said updated application component instance (see, for example, col. 9, lines 6-43; and col. 10, lines 39-66).

As per claim 4, *Ma et al.* further disclose the initializing step comprising: communicating configuration information to said configuration client (see, for example, col. 9, lines 6-43); and



reinitializing state information internal to each said updated application component based on said configuration information (see, for example, col. 9, lines 6-43; and col. 10, lines 39-66).

As per claim 5, *Ma et al.* further disclose requesting from said configuration client update notifications, said update notifications notifying said platform of application component updates as said updates become available in said configuration server (see, for example, col. 9, lines 6-43).

As per claim 6, *Ma et al.* further disclose the step of transmitting update notifications over said second communications connection to said configuration client, said update notifications notifying said configuration client of application component updates as said updates become available in said configuration server (see, for example, col. 9, lines 6-43).

As per claim 10, *Ma et al.* disclose a platform for managing active application components (client app 74; see, for example, Fig. 5; col. 8, lines 10-34; and col. 9, lines 6-43); a configuration server for storing updates (meta server 70; see, for example, Fig. 5; and col. 11, lines 1-24); and a configuration client for receiving updates from said configuration server and communicating said received updates to said platform (object adapter 80; see, for example, Fig. 5; col. 8, lines 10-34; and col. 9, lines 6-43); said platform receiving said updates from said configuration client, terminating selected ones of said active application components, applying said received updates to said terminated application components, and reloading said updated application components (see, for example, Figs. 5 and 8; col. 9, lines 6-43; and col. 11, lines 25-40).

As per claim 13, *Ma et al.* further disclose a notifier object and a listener interface, wherein said active application components are configured to receive update notifications from

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said configuration client through said listener interface (see, for example, col. 9, line 6, through col. 10, line 66).

As per claim 14, *Ma et al.* further disclose a notifier object and a listener interface, wherein said configuration client is configured to receive update notifications from said configuration server through said listener interface (see, for example, col. 9, line 6, through col. 10, line 66).

As per claims 15-20, these are machine readable storage versions of the claimed method steps discussed above (claims 1-6). *Ma et al.* further disclose the use of a machine readable storage for implementing the prescribed method steps (see, for example, cols. 21-22). All other limitations have been addressed as set forth above.

As per claims 24-31, see the disclosure applied above to claims 1-3, 5, 15-17, and 19.

### ***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,920,725 to Ma et al. in view of Andrew S. Tanenbaum, "Computer Networks," 1996, Prentice Hall PTR, third ed. (hereinafter *Tanenbaum*).

As per claims 7 and 21, *Ma et al.* disclose such a method and machine readable storage (see the disclosure applied above to claims 6 and 20) but fail to expressly disclose the use of UDP packets for delivering the update notifications. However, *Tanenbaum* teaches that it is known to use UDP packets in client-server applications involving one-shot or one request/one response messaging as an alternative to establishing a connection through, for example, a TCP connection (see, for example, pages 37 and 542-543). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to modify the method and storage of *Ma et al.* to include the use of UDP packets for transmitting update notifications. One would be motivated to do so to gain the advantages of prompt delivery and simplified messaging that UDP provides.

16. Claims 8, 9, 11, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,920,725 to Ma et al. in view of Applicant's Admitted Prior Art.

As per claims 8, 9, 11, 22, and 23, *Ma et al.* disclose such a method, system, and storage (see the disclosure applied above to claims 1, 10, and 15) but fail to expressly disclose the use of an LDAP-based database in an LDAP server. However, Applicant admits that it is known to use an LDAP on a server to access application updates and configuration information stored in a

directory service (see p. 2, line 18, through p. 3, line 5 of the instant specification). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to modify the method, system, and storage of *Ma et al.* to include the use of an LDAP-based database in an LDAP server as suggested by Applicant's Admitted Prior Art. One would be motivated to do so to gain the advantages of such a known LDAP implementation.

17. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,920,725 to Ma et al. in view of Official Notice.

As per claim 12, *Ma et al.* disclose such a system, including the active application components being instances of classes (objects) in an object-oriented programming language (see, for example, the Abstract) but fail to expressly disclose the active application components being instances of JAVA™ programming language classes. However, Official Notice is taken that the JAVA™ programming language has been a known and widely used programming language for implementing object-oriented programs comprising instances of classes. Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to modify the system of *Ma et al.* to include the use of instances of JAVA™ programming language classes as the active application components. One would be motivated to do so to gain the advantages of platform independence and abundant support resources that the JAVA™ programming language provides.

***Conclusion***

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

19. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric B. Kiss whose telephone number is (703) 305-7737. The Examiner can normally be reached on Tue. - Fri., 7:30 am - 5:00 pm. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

EBK  
November 25, 2003



**TUAN DAM**  
**SUPERVISORY PATENT EXAMINER**